SAFETY DATA SHEET

Revision date 18-August-2022

1. Identification				
Product identifier				
Product Name	FLURBIPROFEN, USP			
Other means of identification				
Product Code(s)	F1128			
UN/ID no	UN2811			
Synonyms	None			
Recommended use of the chemical	and restrictions on use			
Recommended use	No information available			
Restrictions on use	No information available			
Details of the supplier of the safety data sheet				
<u>Supplier Address</u> Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000				
Emergency telephone number				
Emergency Telephone				

Emergency Telephone

Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

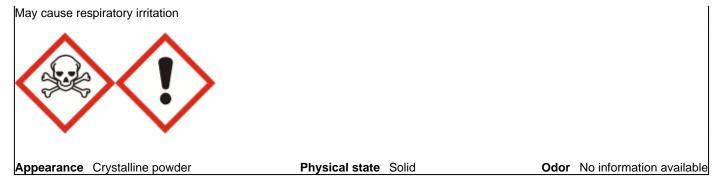
Danger

Hazard statements

Toxic if swallowed Causes skin irritation Causes serious eye irritation



Revision Number 2



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see .? on this label) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTER or doctor if you feel unwell IF SWALLOWED: Immediately call a POISON CENTER or doctor Rinse mouth

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

No information available.

3. Composition/information on ingredients

Substance

Chemical name	CAS No	Weight-%	Trade secret
Flurbiprofen	5104-49-4	100	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.	
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep	

	eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.			
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.			
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.			
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).			
Most important symptoms and effects, both acute and delayed				
Symptoms	May cause redness and tearing of the eyes. Burning sensation.			
Indication of any immediate medical attention and special treatment needed				
Note to physicians	Treat symptomatically.			
5. Fire-fighting measures				

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the No information available. chemical		
Hazardous combustion products Carbon Monoxide, Carbon Dioxide. Hydrogen fluoride gas.		
Explosion data Sensitivity to mechanical impac	st none.	
Sensitivity to static discharge	none.	
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.	
Other information	on Refer to protective measures listed in Sections 7 and 8.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters			
Exposure Limits	The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.		
Appropriate engineering controls			
Engineering controls	Showers Eyewash stations Ventilation systems.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	If splashes are likely to occur, wear safety glasses with side-shields.		
Hand protection	Wear suitable gloves. Impervious gloves.		
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.		
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.		
General hygiene considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.		

9. Physical and chemical properties

Information on basic physical and o	chemical properties	
Physical state	Solid	
Appearance	Crystalline powder	
Color	White	
Odor	No information available	
Odor threshold	No information available	
Property	Values	Remarks • Method
pH	no data available	None known
Melting point / freezing point	111 °C / 231.8 °F	None known
Boiling point / boiling range	no data available	None known
Flash point	no data available	None known
Evaporation rate	no data available	None known
Flammability (solid, gas)	no data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	

Vapor pressure	No data available	None known		
Vapor density	no data available	None known		
Relative density	1.2	None known		
Water solubility	Practically insoluble in water	None known		
-	Soluble in Buffer			
Solubility(ies)	Slightly soluble in Dimethyl sulfoxide (DMSO)	None known		
	Slightly soluble in alcohol			
Partition coefficient	No data available	None known		
Autoignition temperature	no data available	None known		
Decomposition temperature		None known		
Kinematic viscosity	no data available	None known		
Dynamic viscosity	No data available	None known		
Other information				
Explosive properties	No information available			
Oxidizing properties	No information available			
Softening point	No information available			
Molecular weight	No information available			
VOC Content (%)	No information available			
Liquid Density	No information available			
Bulk density	No information available			
10. Stability and reactivity				
Reactivity	No information available.			
Chemical stability	Stable under normal conditions.			
Possibility of hazardous reactions	None under normal processing.			
Conditions to avoid	None known based on information supplied.			
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.			
Hazardous decomposition products None known based on information supplied.				

11. Toxicological information

Information on likely routes of exposure

Product Information

Product Information				
Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.			
Eye contact	Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.			
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).			
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if swallowed. (based on components).			
Symptoms related to the physical, chemical and toxicological characteristics				
Symptoms	Redness. May cause redness and tearing of the eyes.			
Acute toxicity				

Numerical measures of toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Flurbiprofen	= 117 mg/kg (Rat)	-	-
5104-49-4			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Serious eye damage/eye irritation Respiratory or skin sensitization Germ cell mutagenicity	Classification based on data available for ingredients. Irritating to skin. Classification based on data available for ingredients. Causes serious eye irritation. No information available. No information available.
Reproductive toxicity	No information available.
STOT - single exposure STOT - repeated exposure Aspiration hazard	No information available. No information available. No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information	on and a state of the state of
Ecotoxicity	The environmental impact of this product has not been fully investigated.
Persistence and degradability Bioaccumulation	No information available. Inherently biodegradable.
Other adverse effects	No information available.

13. Disposal considerations

Waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

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DOT	
UN/ID no	UN2811
Proper Shipping Name:	Toxic solids, organic, n.o.s.
Hazard class	6.1
Packing group:	III
Special Provisions	IB8, IP3, T1, TP33
Marine Pollutant	Severe Marine Pollutant
Description:	UN2811, Toxic solids, organic, n.o.s., 6.1, III
Emergency Response Guide	154
Number	
TDG	

UN-No: Proper Shipping Name:

UN2811 Toxic solid, organic, n.o.s.

6.1 Hazard class Packing Group: Ш **Special Provisions** 16 **Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III MEX UN-No UN2811 **Proper Shipping Name** Toxic solid, organic, n.o.s. Hazard class 6.1 **Special Provisions** 223, 274 Packing Group Ш Description UN2811, Toxic solid, organic, n.o.s., 6.1, III ICAO (air) UN-No: UN2811 **Proper Shipping Name:** Toxic solid, organic, n.o.s. **Hazard class** 6.1 **Packing Group:** Ш Special Provisions A3, A5 Description: UN2811, Toxic solid, organic, n.o.s., 6.1, III ΙΑΤΑ **UN number** UN2811 **Proper Shipping Name:** Toxic solid, organic, n.o.s. Transport hazard class(es) 6.1 Packing group Ш **ERG Code** 6L **Special Provisions** A3, A5 UN2811, Toxic solid, organic, n.o.s., 6.1, III **Description:** IMDG **UN** number UN2811 Toxic solid, organic, n.o.s. Proper shipping name Transport hazard class(es) 6.1 Packing group Ш EmS-No F-A, S-A **Special Provisions** 223, 274 NP1 Marine pollutant Description UN2811, Toxic solid, organic, n.o.s., 6.1, III RID **UN number** UN2811 **Proper Shipping Name:** TOXIC SOLID, ORGANIC, N.O.S. Transport hazard class(es) 6.1 **Packing group** Ш **Classification code** T2 **Special Provisions** 274, 614 UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, III **Description:** Labels 6.1 ADR **UN number** UN2811 **Proper Shipping Name:** Toxic solid, organic, n.o.s. Transport hazard class(es) 6.1 Packing group Ш **Classification code** T2 **Tunnel restriction code** (E) **Special Provisions** 274.614 **Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III, (E) Labels 6.1 ADN **UN/ID** No UN2811 Proper shipping name Toxic solid, organic, n.o.s. Transport hazard class(es) 6.1 **Packing Group** Ш

Classification codeT2Special Provisions274, 614, 802DescriptionUN2811, Toxic solid, organic, n.o.s., 6.1, IIIHazard label(s)6.1Limited quantity (LQ)5 kgEquipment RequirementsPP, EP

15. Regulatory information

International Inventories

TSCA

Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Flurbiprofen - 5104-49-4	female reproductive toxicity
	developmental toxicity

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 2 Flammability 0 Instability 0 Physical and chemical properties -HMIS Health hazards 2 Flammability 0 Physical hazards 0 Personal protection X Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION TWA (time-weighted average) STEL (Short Term Exposure Limit) TWA STEL Ceiling Maximum limit value Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization **Revision date** 18-August-2022 **Revision Note**

Disclaimer

No information available.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet